

4002949 44504

FIG. 1

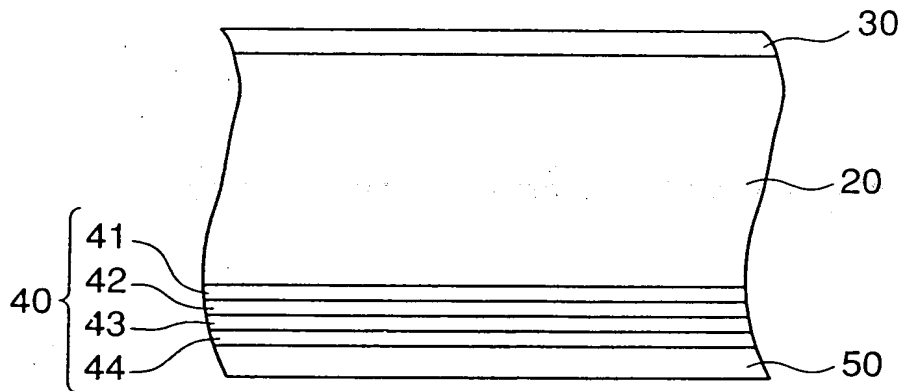


FIG. 2 (a)

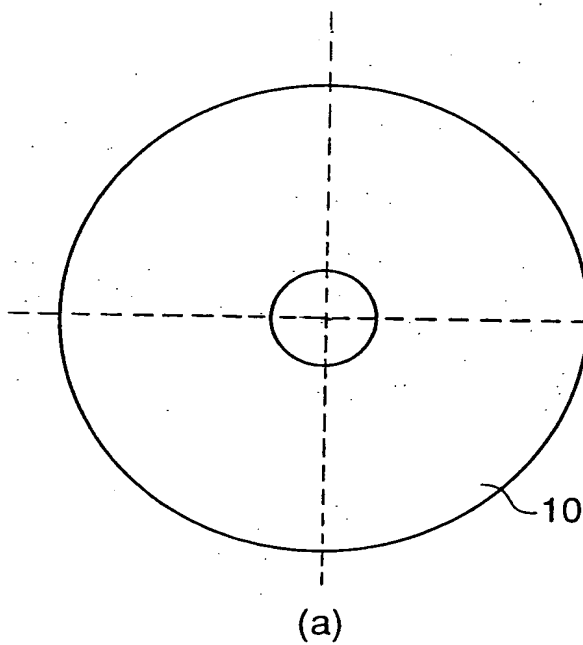
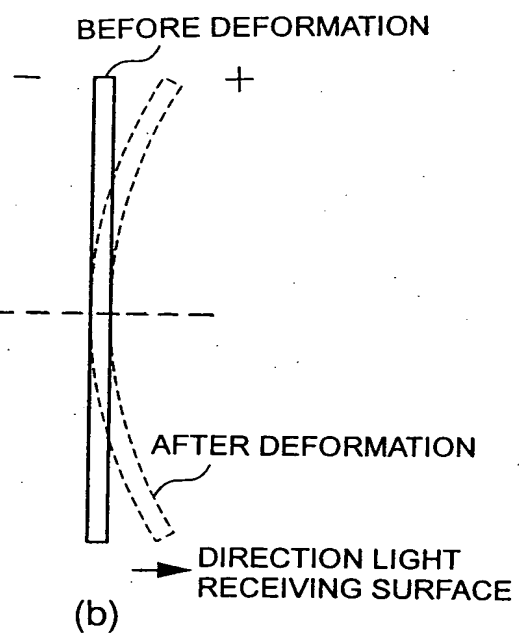


FIG. 2 (b)



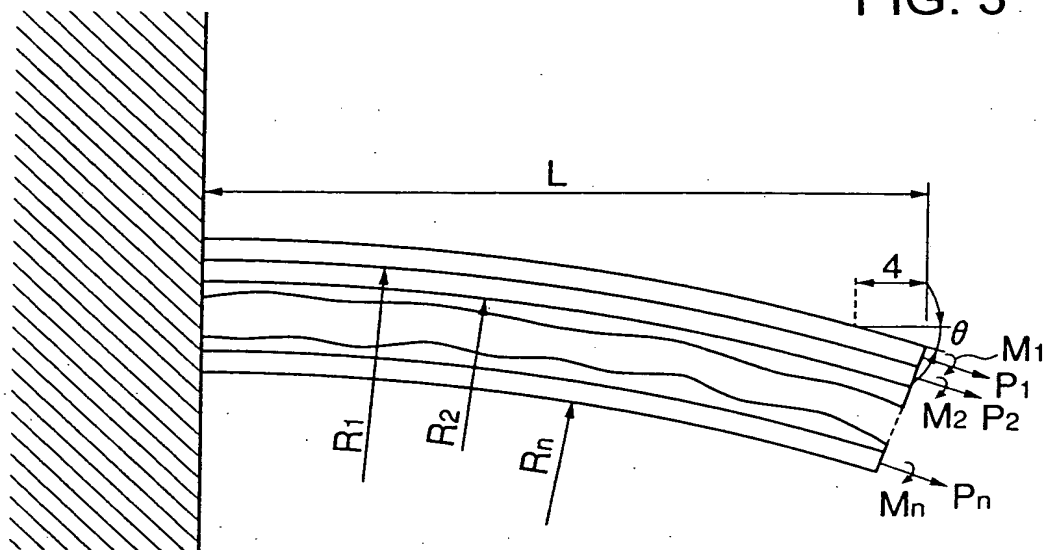


FIG. 3

FIG. 4 PRIOR ART

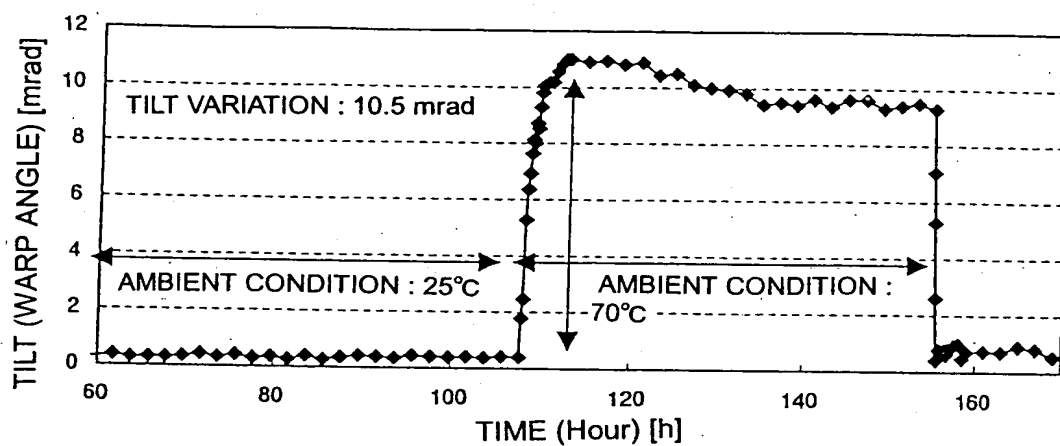


FIG. 5

EXAMPLE 1

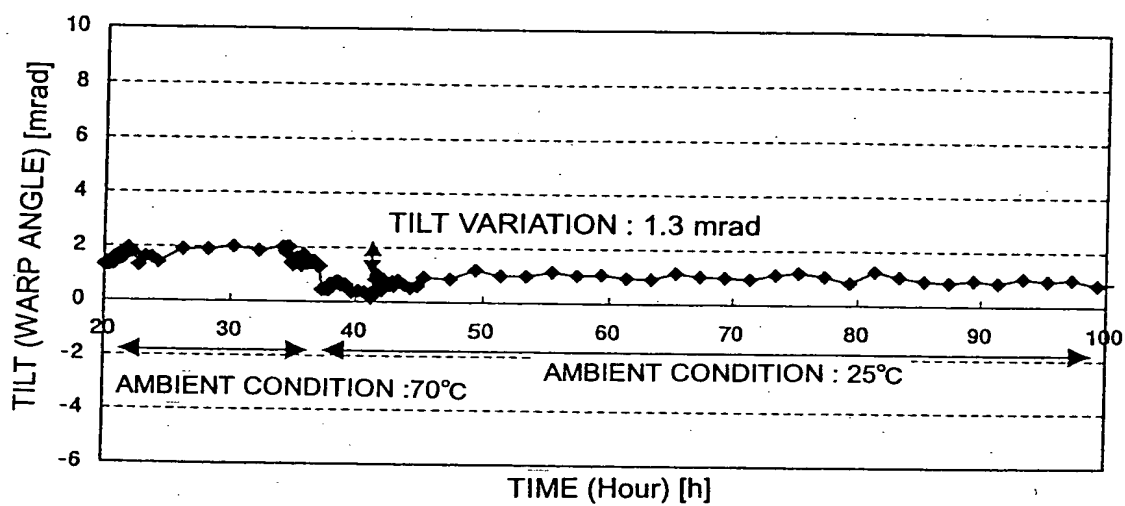


FIG. 6

EXAMPLE 2

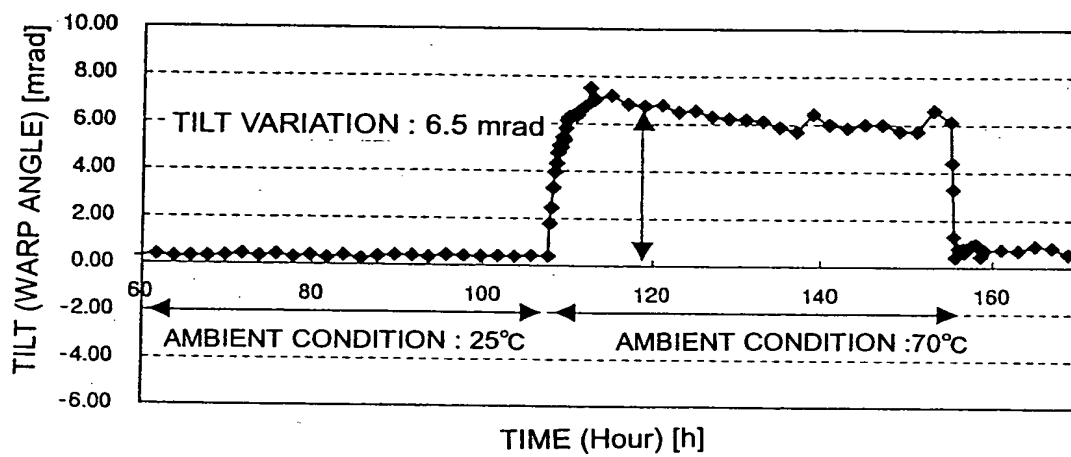


FIG. 7

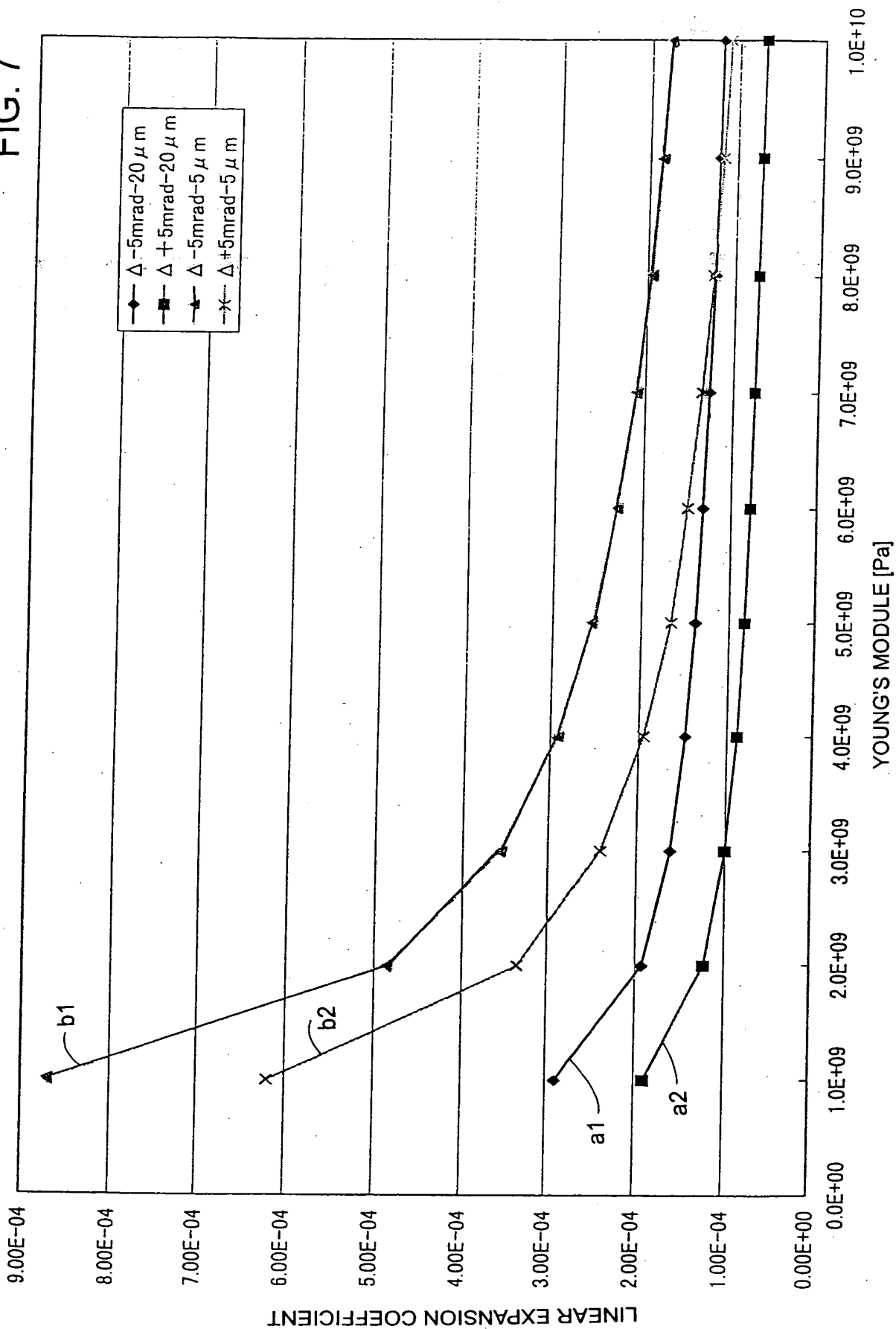


FIG. 8 (a)  
PRIOR ART

FIG. 8 (b)  
PRIOR ART

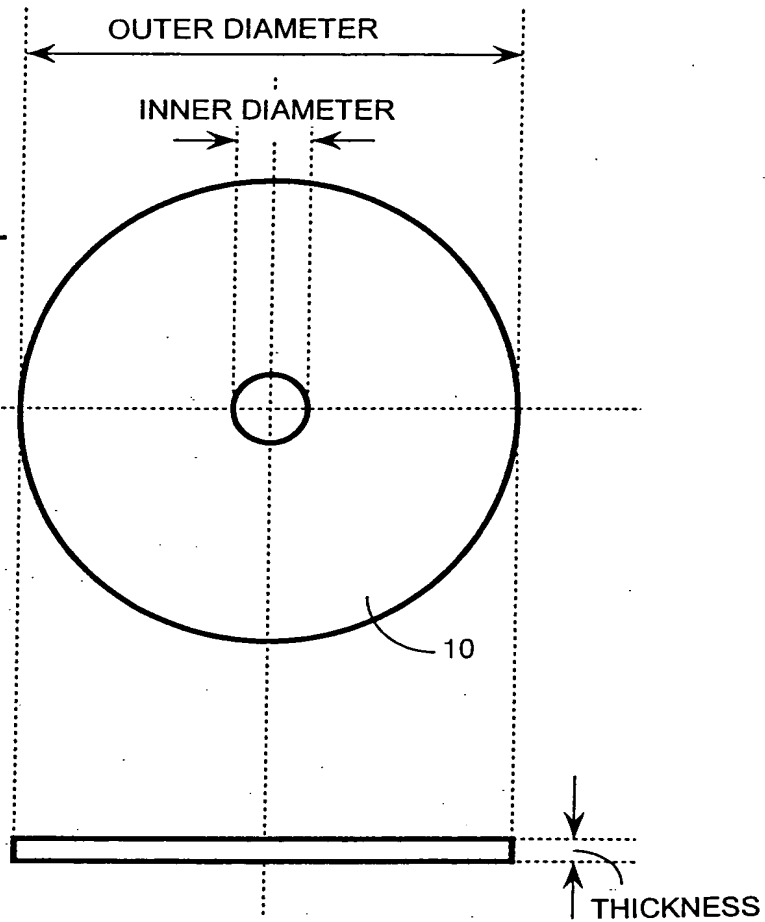


FIG. 9 PRIOR ART

FIG. 9 PRIOR ART

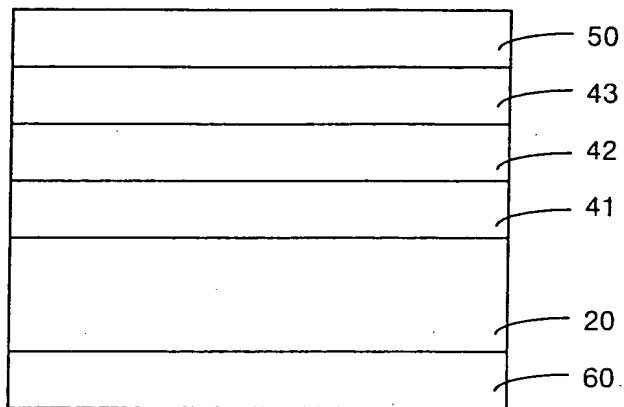


FIG. 10 PRIOR ART

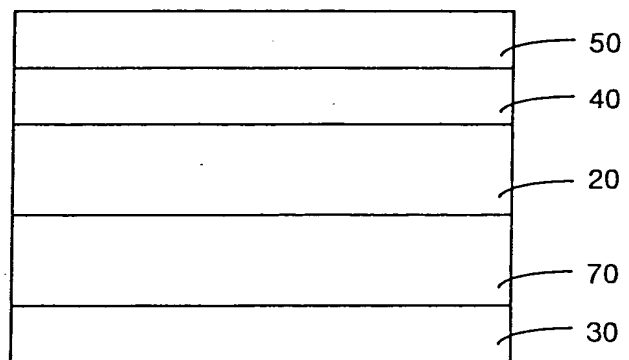




FIG. 11

EXAMPLE 1	MATERIAL	THICKNESS	YOUNG'S MODULUS (Pa)	LINEAR EXPANSION COEFFICIENT (1/°C)
TRANSPARENT SUBSTRATE 20	POLYCARBONATE	0.5mm	2.41E+09	6.00E-05
THIN FILM LAYER 40	ALUMINUM NITRIDE	65nm	3.43E+11	5.60E-06
PROTECTIVE FILM 50	UV CURING RESIN 1	16µm	5.40E+09	9.50E-05

FIG. 12 PRIOR ART

COMPARATIVE EXAMPLE 1	MATERIAL	THICKNESS	YOUNG'S MODULUS (Pa)	LINEAR EXPANSION COEFFICIENT (1/°C)
TRANSPARENT SUBSTRATE 20	POLYCARBONATE	0.5mm	2.41E+09	6.00E-05
THIN FILM LAYER 40	ALUMINUM NITRIDE	65nm	3.43E+11	5.60E-06
PROTECTIVE FILM 50	UV CURING RESIN 2	16µm	5.40E+09	5.62E-05

FIG. 13

EXAMPLE 2	MATERIAL	THICKNESS	YOUNG'S MODULUS (Pa)	LINEAR EXPANSION COEFFICIENT (1/°C)
TRANSPARENT SUBSTRATE 20	POLYCARBONATE	0.5mm	2.41E+09	6.00E-05
THIN FILM LAYER 40	ALUMINUM NITRIDE	65nm	3.43E+11	5.60E-06
PROTECTIVE FILM 50	UV CURING RESIN 3	16µm	9.00E+09	5.68E-05

FIG. 13

FIG. 14

